REMARKS

Applicants thank the Examiner for total consideration given the present application. Claims 1-10 are currently pending of which claims 1, 5, 6, and 10 are independent. Claims 5 and 10 remain withdrawn as being directed to a non-elected invention. Claims 1 and 6 have been amended through this Reply. Applicants respectfully request reconsideration of the rejected claims in light of the amendments and remarks presented herein, and earnestly seek timely allowance of all pending claims.

35 U.S.C. § 102 REJECTION – Sato

Claims 1-4 and 6-9 are finally rejected under 35 U.S.C. § 102 as allegedly being anticipated by Sato et al. (U.S. Patent Publication No. 2003/0156204)[hereinafter "Sato"]. Applicants respectfully traverse this rejection.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. 2131; M.P.E.P. 706.02.* Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, Sato fails to teach or suggest each and every claimed element. For example, amended independent claim 1 recites, *inter alia*, "a distance-correction value calculating step of calculating a distance-correction value, by inputting the calculated distance for corresponding variable in an N-order function ***which has coefficients for the variable***, N being a positive integer; a correction coefficient calculating step of calculating, based on ***a preliminarily set table*** that represents correspondences between distance-correction values and correction coefficients, a correction coefficient corresponding to the calculated distance-correction value, and a pixel signal correcting step of correcting a signal for the pixel based on the correction coefficient; and ***an updating step of updating distance-correction values by changing the coefficients for the variable in said N-order function in the distance-correction value calculating step in response to change in optical settings of an image pick-up apparatus***." *Emphasis added.*

Likewise, amended independent claim 6 recites, *inter alia*, "a distance-correction value calculating unit that calculates a distance-correction value, by inputting the calculated distance

for corresponding variable in an N-order function ***which has coefficients for the variable***, N being a positive integer; a correction coefficient calculating unit that calculates, based on ***a preliminarily set table*** that represents correspondences between distance-correction values and correction coefficients, a correction coefficient corresponding to the distance-correction value that has been calculated by the distance-correction value calculating unit; a pixel signal correcting unit that corrects a signal for the pixel based on the correction coefficient that has been calculated by the correction coefficient calculating unit; and ***a control unit that updates distance-correction values by changing the coefficients for the variable in said N-order function in the distance-correction value calculating unit in response to change in optical settings of said image pick-up apparatus***. *Emphasis added.*

It is respectfully submitted that Sato fails to teach or suggest the above-identified feature of claims 1 and 6.

As previously submitted, Sato discloses an image pick-up device 3 in which shading is corrected by utilizing correction coefficients provided in a lookup table (LUT) 8. These correction coefficients correspond to distance values and are output to a correction block 9. More specifically, distance values from an arbitrary point are calculated for a desired point on a display screen of the imaging device 3, and the calculated distance values are converted according to the number of pixels by using converted distance values to determine correction coefficients. (*See paragraphs [0043], [0047], and [0050].*)

Sato is distinguished from the claimed invention in that nowhere does Sato teach or suggest a correction coefficient calculating unit (or step) that calculates, based on ***a preliminarily set table*** that represents correspondences between distance-correction values and correction coefficients, a correction coefficient corresponding to the calculated distance-correction value. Although, Sato discloses a LUT 8, the values of the LUT are provided calculations of the number of pixels forming the maximum distances (diagonal lines) for each of seven types of semiconductor image pick-up devices, the number of pixels of which range from 790,000 pixels to 12,600,000 pixels and not based on a preliminary set table. (*See paragraph [0043].*)

Further, Sato fails to teach or suggest a distance-correction value in which a variable used in determining the value can be changed to make adjustments. Moreover, Sato fails to

teach or suggest ***updating distance-correction values by changing the coefficients for the variable in the N-order function in the distance-correction value calculating step in response to change in optical settings of an image pick-up apparatus***.

The Examiner is correct to note that Sato discloses providing correction coefficients for seven different semiconductor image pick-up devices. However, Sato is completely silent in ***updating distance-correction values*** by ***changing the coefficients for the variable*** in an ***N-order function in the distance-correction value calculating step in response to change in optical settings of an image pick-up apparatus***.

Since the claimed invention updates distance-correction values by changing the coefficients for the variable in the N-order function in the distance-correction value calculating step in response to change in optical settings of an image pick-up apparatus, the claimed invention is capable of making dynamic adjustments for different properties of the apparatus by providing changeable coefficients for calculating distance-correction values. Sato fails to teach or suggest correcting a signal for a pixel based on a correction coefficient corresponding to distance-correction value updated by changing coefficients for the variable in the N-order function in the distance-correction value calculating step. Sato, therefore, does not teach or suggest the ability to make dynamic adjustments for different properties of the apparatus by providing changeable coefficients for calculating distance-correction values. Accordingly, it is respectfully submitted that Sato cannot teach or suggest, *inter alia*, "***updating distance-correction values*** by ***changing the coefficients for the variable*** in an ***N-order function in the distance-correction value calculating step in response to change in optical settings of an image pick-up apparatus***" as recited in claim 1 (and similarly recited in claim 6).

Therefore, for at least these reasons, independent claims 1 and 6 are distinguishable from Sato. Claims 2-4 depend from claim 1 and claims 7-9 depend from claim 6. Therefore, for at least the reasons stated with respect to claims 1 and 6, claims 2-4 and 7-9 are also distinguishable from Sato.

CONCLUSION

All rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claims does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Ali M. Imam Reg. No. 58,755 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: September 30, 2010

Respectfully submitted,

By  #58,755
Michael K. Mutter
Registration No.: 29680
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road, Suite 100 East
P.O. Box 747
Falls Church, VA 22040-0747
703-205-8000